

## **Command Usage**

1. Use nslookup and dig commands on nitk.ac.in.
2. Ping nitk.ac.in with 4 packets of data. What is the number of packets received and % packets lost?

## **Socket Programming**

1. Build a client-server system to implement Calculator
  - Client receives inputs (2 operands & 1 Operator) from user and sends them to the server
  - Server does the mathematical operation and sends result back to client
  - Client displays the "Result"
2. Build a client-server system to check the validity of a password. The client receives the password from the user and sends it to the Server for validation. After password validation, the Server responds to the Client with appropriate messages. Condition for password validation
  - Minimum 8 characters and Maximum 20 characters.
  - The alphabet must be between [a-z]
  - At least one alphabet should be of Upper Case [A-Z]
  - At least 1 number or digit between [0-9]
  - At least 1 character from [ \_ or @ or \$ ]

## References:

1. [https://www.youtube.com/playlist?list=PLQVvva0QuDdzLB\\_0JSTTcl8E8jsJLhR5](https://www.youtube.com/playlist?list=PLQVvva0QuDdzLB_0JSTTcl8E8jsJLhR5)
2. <https://www.youtube.com/playlist?list=PLhTjy8cBISerYuLZUvVOYsR1giva2payF>
3. <https://www.youtube.com/watch?v=l5WU7d49OGk&list=PLS1QulWo1RIZGSgRsn0b8w9uoWM1gHDpo>
4. <https://youtu.be/wzrGwor2veQ?feature=shared>
5. <https://www.youtube.com/watch?v=8A4dgoGL62E>
6. <https://www.youtube.com/watch?v=3QiPPX-KeSc>
7. [Beej's Guide to Network Programming](#)